Successfully exchanging methods and processes between institutions to create Open Educational Resources

Conference or Workshop Item

SUCCESSFULLY EXCHANGING METHODS AND PROCESSES BETWEEN INSTITUTIONS TO CREATE OPEN EDUCATIONAL RESOURCES

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Abstract

Higher Education Institutions are encouraged to share their course materials for the benefit of academics and learners worldwide. Open Educational Resources (OER) are one approach to releasing stored learning materials from closed systems into open systems. An expectation of the approach is to find new learners but also to allow two-way exchange of teaching material between educational providers. However, such exchange is not straightforward to achieve. Experience in transforming closed content into open content has identified issues of infrastructure, technical support, pedagogic design, ownership of tasks, and specification of roles.

The Open University's *OpenLearn* initiative established a site for learners to access OER and has built up methods, processes and procedures for transforming material from existing courses into a suitable form for open use. These materials are available for download; re-purposing and re-upload to the *OpenLearn LabSpace*. In the first year of operation relatively low numbers of new or changed courses appeared in the *LabSpace*. As a result, a parallel project, *POCKET* (Project on Open Content for Knowledge Exposition and Teaching), was tasked with finding ways for the *OpenLearn* model of production to be transferable to partner universities whilst providing content for open use in the *LabSpace*. The emphasis in this paper is on how new content has been brought to the *OpenLearn LabSpace* from other universities as a result of the successful exchange and improvement of methods for working with Open Educational Resources.

Keywords

Open Educational Resources, Open education, *OpenLearn* units, *POCKET* units, International, Different disciplines, Innovative, Technology enhanced learning, Internet based technologies.

1. INTRODUCTION

Educational establishments have developed teaching materials within closed environments or individual educational silos for many years. In the past this may have been due to the relative independence of institutions, particularly in the higher education sector, and a feeling of 'this is how we have always developed educational materials'. With advances in technology, the availability of social networking tools and the worldwide push to share educational materials; the current situation is surely untenable. As a case in point, 'OERs would be of great benefit to the community, increasing the value of individual resources and increasing the well-being of the community ...' [1:p2]). There are now many OER repositories available around the world. The Massachusetts Institute of Technology (MIT) http://web.mit.edu/ was the leader in this field with the *OpenCourseWare* (OCW) initiative. Many other institutions that followed this initial venture are discussed in the literature ([1], [2], [3], [4], [5] and [6]).

The Open University http://www.open.ac.uk in the United Kingdom (UK) entered the OER arena by presenting distance learning course materials as OER in *OpenLearn*. *OpenLearn* received funding from The William and Flora Hewlett Foundation and is the repository focused upon in this paper. The discussion however, does not revolve around *OpenLearn* per se, rather on *OpenLearn* as the vehicle, which provides processes, procedures and a platform on which other Higher Education Institutions (HEI) can host their course materials as OER. More information is available about *OpenLearn* ([7], [8] and [9]) and the OER available in subject areas [10].

OpenLearn has attracted more than three million visitors to its websites, however there was relatively little evidence of use, reuse and upload of new content in the *Openlearn LabSpace*. Use of OER in the form that they are presented or 'as-is reuse' [6] is much more common than adaptation of OER. As a result, the Project on Open Content for Knowledge Exposition and Teaching (*POCKET*) was devised to work along side *OpenLearn* to find ways for the *OpenLearn* model of production to be transferable to other universities. It is recommended that OER be developed in such a way that they are easily reusable: technically, linguistically, culturally, and pedagogically [6]. The focus of this paper therefore is on the need to revise the existing process and develop alternative refinements of the process involved in the download, reworking and upload of new content to the LabSpace. These improvements will be of particular benefit to institutions other than the Open University and a particular focus is on the upload of new content.

1.1 Background for the *POCKET project*

The *POCKET* project has been designed to influence what has already been invested in OpenLearn and extend Open Content activity to other universities. Effectively *POCKET* was established to:

- investigate the issues that inhibit users from the download, upload and re-purposing of OERs in the *OpenLearn LabSpace*,
- adopt and improve upon the systems developed in OpenLearn,
- create substantial additional amounts of new quality assured Open Content learning resources at higher education level and
- extend the *POCKET* methods and findings to other new partner institutions.

To achieve these objectives, the three campus-based universities are transforming or repurposing existing and new educational material for open use in the *OpenLearn LabSpace*. Whole courses of web based materials from the universities of Derby, Exeter and Bolton, which in the main have been published in password protected areas (such as WebCT) are being made openly available in the *OpenLearn LabSpace*. Overall the project expects to develop between 50 and 120 distinct units, which is equivalent to between 250 and 600 hours of study time. This includes one course, which is developed from scratch specifically for *POCKET*. The work on the project includes consideration of ways to improve the conversion of material and upload of new content (in an XML format) to the *OpenLearn LabSpace*.

2. APPROACH

POCKET is led by the University of Derby and is partnered by The Open University and the Universities of Bolton and Exeter. *POCKET* is funded by the United Kingdom Joint Information Systems Committee. The approach taken by *POCKET* is evaluative and considers transfer of lessons learned from the reworking of distance learning materials (within the *OpenLearn* initiative) to the reworking of material from campus-based universities (supported by the *POCKET* project).

2.1 Aim and research methods

The aim of this research is to investigate how methods and processes can be exchanged between *OpenLearn* and *POCKET* to enable universities other than The Open University to create OER using OU XML. The paper includes a report on two different approaches to developing *POCKET* OER. The main evaluator is a participant observer who already has experience of working with OER and conducting Open Content research on *OpenLearn*.

The processes, procedures and documentation adopted are evaluated using the following data collection tools:

- Participant reflections:
  - email messages
  - meetings (face to face and through FM)
- Workshop(s)
- Observation

3. FINDINGS

This paper discusses the work of the four consortium partners in *POCKET* in terms of the process of adoption, transfer and improvement of the process between *OpenLearn* and *POCKET.*

3.1 Learning from *OpenLearn*

OpenLearn itself successfully uploaded target numbers of study hours by key milestone dates. This created an expectation that the *POCKET* project could simply adopt the process, procedures and documentation devised by *OpenLearn*. It may have appeared to the campus based partners involved in the *POCKET* project that the development and upload of *POCKET* OERs would be straightforward.

In reality the *OpenLearn* transformation process was supported by a large team, which was driven to work at a fast pace to meet targets. The *OpenLearn* team included academics; technical, media, copyright and project support staff. The project started in April 2006 though all staff were not appointed until the end of August 2006. *OpenLearn* needed to develop an infrastructure, twin websites and publish 900 study hours of OER by 25th October 2006. In addition the *OpenLearn* project set itself ambitious targets to publish 13,500 study hours in the form of distance learning OERs by April 2008. In order to meet these targets, methods, processes, procedures and documentation were devised, revised and updated. This was an iterative process, which took place over time using trial and error. Those working within this project built up a wealth of experience over a very short time. Working at a fast pace can mean that useful legacy material can be captured in different places. When the *POCKET* project started much of the experience was still in the heads of the individuals involved in *OpenLearn* and it was important to assess how much of it could be captured easily and transferred to follow on projects such as *POCKET*.

An important factor in developing Open Content is the need to determine whether the material is deemed suitable for transfer into an OER. Issues with the conversion of distance learning course materials into *OpenLearn* OER and suggested criteria for judging the suitability of course material for OER delivery is discussed [11]. A number of models of transformation have been proposed ([12] and [13]). However the majority of the OERs in *OpenLearn* are transformed under what Lane terms the 'Integrity model', essentially all of the material in the subsequent OER is recognisably similar to the original material. The *POCKET* project decided to also follow the 'Integrity model' for transformation of their material.

3.2 Barriers to transformation

Issues concerned with the reuse of *OpenLearn* material was considered by five HEI. They were approached between three and six months after *OpenLearn* was launched (early 2007) and before the *POCKET* project started.

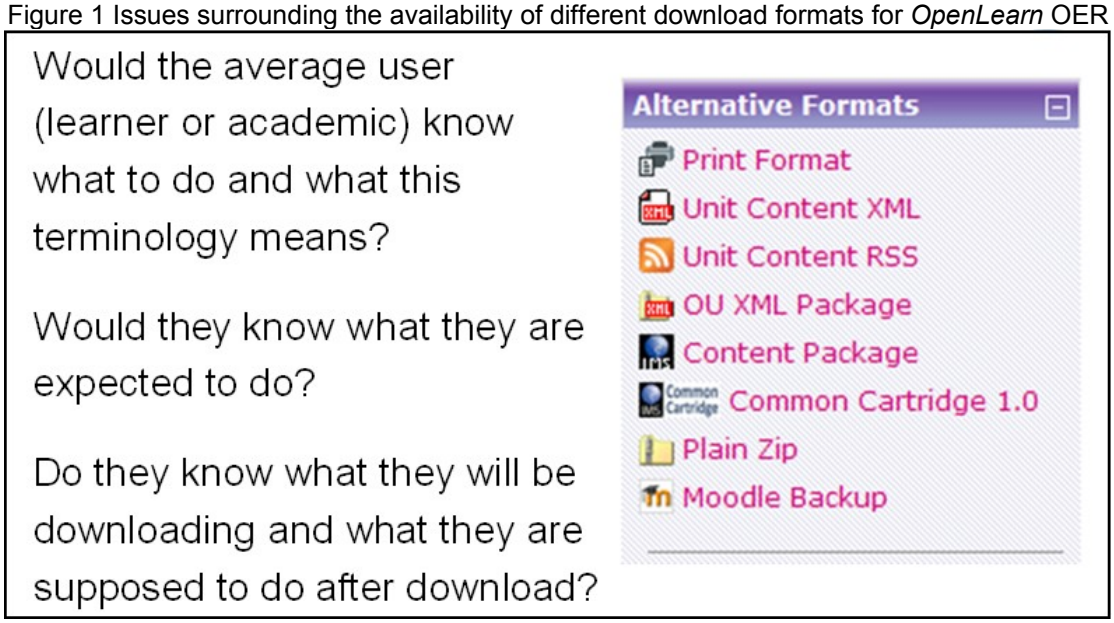
> 'The findings conveyed an overall feeling of needing more support from the participants' home institution and *OpenLearn* in terms of time:
>
> - To investigate what useful elements of existing OER to reuse as part of a teaching programme.
> - For training in how to adapt OER.
> - To physically adapt the OER to local needs'. [9]

OpenLearn's preferred format for OER development, upload and download at launch was OU XML. The contents of the OU XML download package was developed quickly just before launch. However

user feedback dictated that other transformations providing additional formats should be made available [14].

A review of the alternative formats available in *OpenLearn* (in terms of downloading an *OpenLearn* OER) raises a number of issues, see figure 1. To download an *OpenLearn* unit one has to access the actual unit and select a format for download. With the variety of download formats available it is difficult to know whether the download and upload function is aimed at technical or non-technical users. Hints are not available to indicate to the user what they are expected to do. There is no provision of an explanatory summary (or information in the form of 'rollovers' against each format) to help the user decide which format they would want to adopt. The guidance in the OU XML package is not well structured and not aimed at the novice.

Figure 1 Issues surrounding the availability of different download formats for *OpenLearn* OER



Although this variety of formats was offered on *OpenLearn* the formats other than OU XML were more valuable in terms of reusing OER content already available on *OpenLearn* (rather than for new content). It became apparent that OU XML was the preferred transformation method for new content as it enabled the creation of new content and preservation of the pedagogic structure within the new content.

3.3 Improving on process and procedures - *POCKET*

POCKET has been running in parallel with *OpenLearn* since September 2007. In contrast with *Openlearn*, *POCKET* had a much smaller team for the transformation process: a project manager and a learning technologist based at the University of Derby. An academic based at the University of Bolton and an academic based at the University of Exeter. Other academics within the institutions would have time released from normal duties to participate in the *POCKET* project. *POCKET* has a much smaller team, however the *POCKET* team did not need to be concerned with the technicalities of maintaining and developing the *OpenLearn* platform and websites, as this remained the responsibility of the *OpenLearn* team. *POCKET*'s aim was to publish between 250 and 600 hours of study hours in an 18 month period and this is much more modest than *OpenLearn*'s publication of 13,500 study hours in a two year period. That said, it has to be borne in mind that *POCKET* (similarly to *OpenLearn*) did not have all staff in post at the start of the project.

At an early *POCKET* team meeting it became apparent that the download and upload of *OpenLearn* units was not easy using the instructions available in the OU XML package. The download of an *OpenLearn* OER unit by two *POCKET* team members experienced in the use of XML caused an error. Errors occurred with the re-upload of this unit to the LabSpace. It was not clear from the instructions how the files should be zipped for re-upload. The issue was quickly resolved and the unit was uploaded on 11th October 2007. This activity highlighted the deficiencies in the direction given in the guidance accompanying the OU XML package. This activity also affirmed that some of the knowledge

about *OpenLearn* procedures still remained with those in the *OpenLearn* team, since technical support was sought from *OpenLearn* to resolve the problem.

The first stage in explicating what *OpenLearn* staff knew inherently was to prepare a development kit, which contained all relevant documentation for *OpenLearn*'s processes and procedures [14].

At an early *POCKET* team workshop it became apparent that the *POCKET* units were quite different from the original *OpenLearn* distance-learning units. The Open University OER content was chosen as discrete units of content from its courses. However, the content from the three campus based partners in *POCKET* is in the form of whole course(s) to be transformed into a series of discrete *POCKET* OERs. In addition Open University material is based heavily on print while the material from the three universities involved is mainly web based. Starting with material in a different format and with a much smaller project team indicated the need for changes to processes, procedures and roles as compared to those used on *OpenLearn*. For these reasons it was not possible for the *POCKET* project to readily adopt the processes and procedures used by *OpenLearn*. However this early workshop provided an opportunity to:

- share findings from the development of *OpenLearn* units
- explore issues and differences
- bring the other partner institutions up to speed

At the workshop the *POCKET* project team seemed to be faltering on how the processes would be put into place at the universities of Derby, Bolton and Exeter. There was confusion at first about who would upload the content to *OpenLearn*. At first *POCKET* personnel assumed that the *OpenLearn* team would upload the *POCKET* units to the *OpenLearn LabSpace*. After the workshop the universities of Derby, Bolton and Exeter needed to decide:

- how they were going to transform their materials into OERs,
- which process they were each going to use,
- who was going to co-ordinate all activity for the three universities,
- on roles for the academics both inside and outside the *POCKET* team,
- on the role of the learning technologist and the project manager,
- how copyright and cross selling issues would be dealt with,
- who was going to upload materials to *OpenLearn*,
- how peer review was going to be handled (either before publication or afterwards).

The crucial aspect was how this much smaller team was going to undertake the responsibilities and carry out all the roles previously undertaken by the much larger *OpenLearn* team.

3.4 Different approaches to developing POCKET OER

The *OpenLearn* process of transformation under the 'Integrity model' discussed earlier is also explained [15] using a flowchart (http://kn.open.ac.uk/public/document.cfm?docid=9971). As indicated in the previous section the *POCKET* partners needed to consider how to undertake the full transformation process (from identifying material through to publication in the *LabSpace*) with less people. Considerations included:

- a smaller *POCKET* team,
- a different culture in which courses are produced (individuals or small groups rather than teams of academics),
- a different type of course material (for campus based students rather than distance learners).

The campus based partners in *POCKET* decided to follow the OpenLearn process of transformation for the 'Integrity model' as far as possible though with individuals taking on many more tasks. Two different approaches for the transformation of *POCKET* course material were proposed in order to explore independent actions. They can be described as:

- The learning technologist led approach (adopted by universities of Derby and Exeter)
- The independent academic approach (adopted by University of Bolton)

These two approaches are discussed in more detail below and a converged view is then presented.

3.5 The learning technologist led approach to transformation

Academics at the universities of Derby and Exeter were supported in the transformation of their course material (into OU XML) by the learning technologist at the University of Derby. The learning technologist used the *OpenLearn* development kit and was supported by the *OpenLearn* team. S/he

developed an initial process guide giving the *POCKET* perspective of the transformation process which was influenced by the OpenLearn transformation process flowchart (mentioned in the previous section).

The main stages in the process guide are as follows:
1. Needs analysis. This involves an understanding of the academics perspective on the project and assesses how the learning technologist can be of assistance including staff development opportunities. This is a new stage introduced that was not a part of the *OpenLearn* transformation process.
2. Module material for transformation is identified
3. Initial review - learning technologist and academic work together to:
    - discuss the appropriateness of the module material,
    - draw up a specification for how the material should be transformed, (not included in process guide)
    - find electronic versions of module material
    - consider whether new resources need to be created or additional existing resources identified.
    - consider copyright issues
4. Academic completes a pro forma
5. All module content and supporting resources are handed over to the Learning Technologist for OU XML Tagging
6. Review of draft *POCKET* unit in *PlaySpace* by *POCKET* team and academic,
6a. Learning Technologist checks whether the materials conform to the *OpenLearn* 'Integrity model'
7. Changes made to draft unit (not included in process guide)
8. Final content uploaded to the appropriate topic area in the *LabSpace*
9. Pedagogic support sought from *OpenLearn* Team (not included in process guide)
10. Peer review

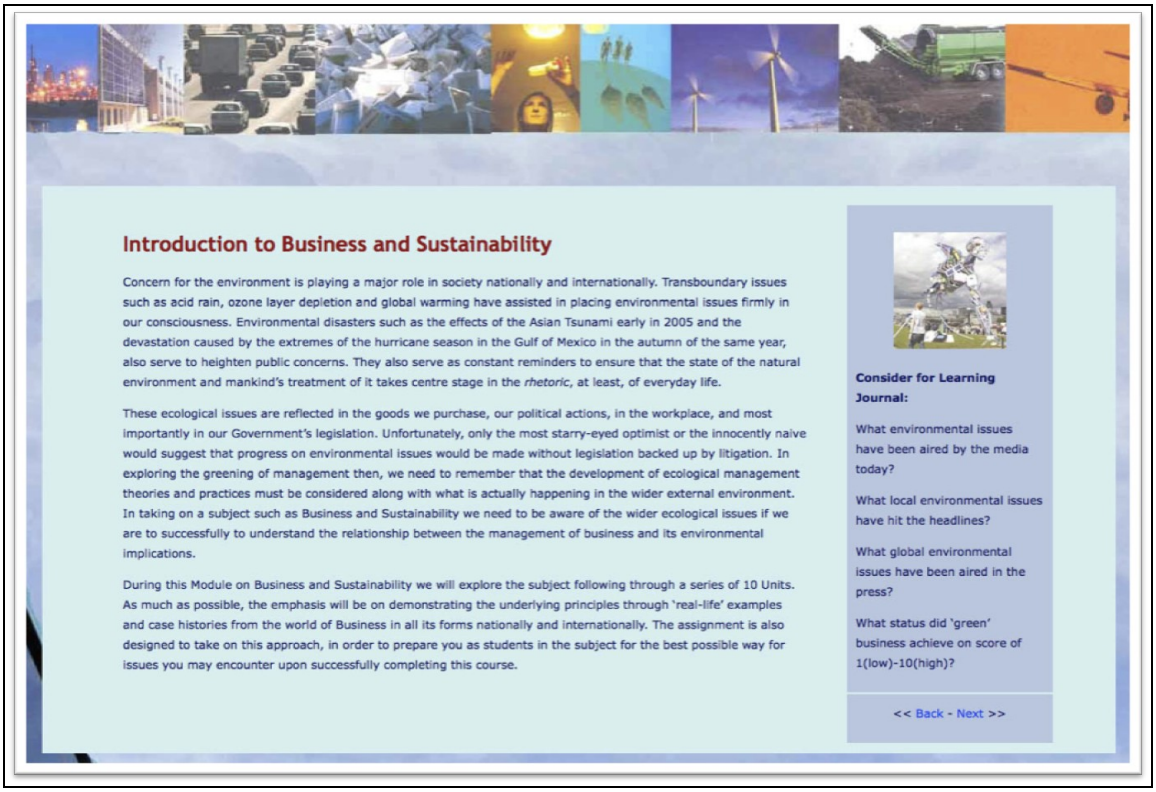
It appeared that the initial version of the development kit was deficient in information about OU XML (it had been based on the OU XML download package). This may be as a result of assumed knowledge in moving from internal advice to external advice. Additional documents were added and advice was sought from the *OpenLearn* Technical team. The development kit was not a stand alone item and needed to be supported by *OpenLearn* in terms of:

- mentoring,
- guidance with respect to *OpenLearn* policies, procedures and processes and how they were changing,
- technical support in terms of understanding the infrastructure,
- guidance on copyright
- editorial and media support and
- pedagogic design and pedagogic support,

The learning technologist at the University of Derby developed a *POCKET* version of the development kit (http://www.derby.ac.uk/pocket/cdk) to suit the needs of the *POCKET* project. At this point the majority of the types of support indicated above were no longer necessary though the pedagogic support role from the Open University (in terms of the design of the OER) did become more important. This was an activity undertaken between the learning technologist and the *OpenLearn* team at the point when the *POCKET* unit was available in either the *PlaySpac*e or within the appropriate topic area in the *LabSpac*e. This activity involved going through the *POCKE*T unit(s) and assessing them against the pedagogic structure of the OpenLearn units. The learning technologist and *OpenLearn* academic worked together to specify changes, which were made subsequently.

The learning technologist worked with the academics at the Universities of Derby and Exeter to decide how to present the original material as an OER. In many cases the original *POCKET* course material was available on the Internet though in a password protected area. An example of original material in 'Business and Sustainability' from the University of Exeter is shown in figure 2. In undertaking the transformation itself the learning technologist found that 'the best way … to see what the [OU XML] schema allows is just to experiment inside it and see what works and what doesn't'.

Figure 2 The University of Exeter's original 'Business and Sustainability' material



S/he downloaded an *OpenLeam*n unit and stripped out the *OpenLearn* content and replaced it with content from the *POCKET* material. She added additional XML tags if they were not already available. Different units in *OpenLearn* had contained different content and required different treatment and therefore utilised different tags. The learning technologist with a small amount of support from the *OpenLearn* team uploaded:

- three units of the University of Exeter's course material see table 1 and
- eleven units of the University of Derby's course material see table 2.

Table 1 POCKET OER published in OpenLearn LabSpace by University of Exeter, Jan 09

Topic areas	Number of study hours and level	Level of study	University of Exeter
Business and Management	5 hours	Intermediate	Introduction to Business and Sustainability
Business and Management	4 hours	Intermediate	Issues in environmental management: beyond the technical fix
Business and Management	4 hours	Intermediate	Sustainability and Business Decision Making

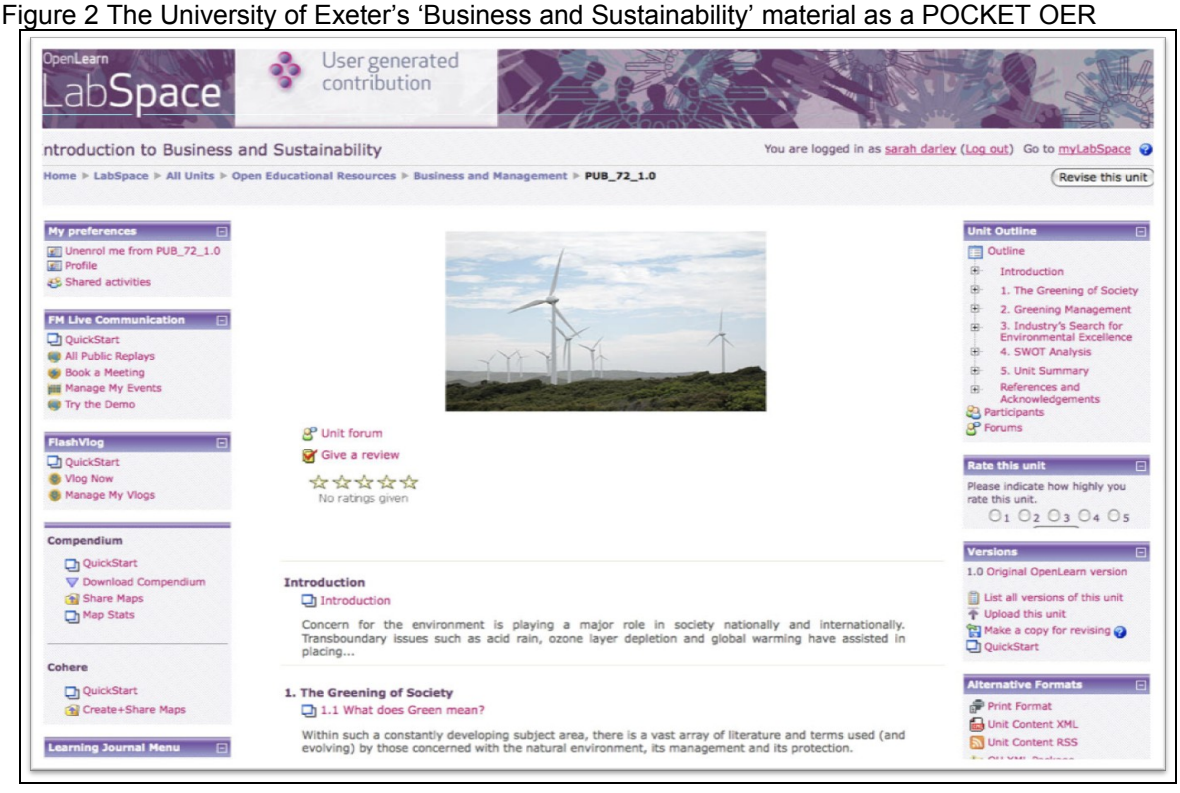
Taken together (tables 1 and 2) these *POCKET* OER units account for 102 study hours of material. The number of study hours ranges between four and twelve indicating that they are in line with the smaller units devised by *OpenLearn*.

Table 2 POCKET OER published in OpenLearn LabSpace by University of Derby, Jan 09

Topic areas	Number of study hours	Level of study	University of Derby
Business and Management	12 hours	Introductory	Introduction to Customer Service
Business and Management	8 hours	Introductory	Market Research Methods
Business and Management	8 hours	Introductory	Responding to Customer Needs
Law	8 hours	Intermediate	A General Introduction to International Economic Law
Law	6 hours	Advanced	International Economic Law vis-à-vis International Environmental Law
Law	8 hours	Advanced	International Development Law
Law	8 hours	Advanced	The Law of the World Trade Organization
Law	8 hours	Advanced	Competition Laws and Theories
Law	8 hours	Advanced	International Monetary Law
Mathematics and Statistics	8 hours	Introductory	Analysis and Presentation of Data
Study Skills	7 hours	Introductory	Writing a Report

The level of study across the units is indicated as undergraduate (Introductory, Intermediate and Advanced). The units are published in four of the *OpenLearn* topic areas ('Business and Management'; 'Law'; 'Mathematics and Statistics'; and 'Study Skills'). It is interesting that content from one course from the university of Derby has spread across three topic areas ('Business and Management'; 'Mathematics and Statistics'; and 'Study Skills') when divided in discrete units of OER. An example of a finished *POCKET* OER from the University of Exeter's 'Business and Sustainability' material is shown in Figure 2.

Figure 2 The University of Exeter's 'Business and Sustainability' material as a POCKET OER



The need to download an OpenLearn unit, strip out the OpenLearn content and add additional XML tags if they were not already available was not a very efficient or reusable process. It appears that in the fast paced working environment of OpenLearn that the upload of new content by other providers was overlooked. It became evident that a new process needed to be devised for the upload of new content to the *LabSpace* (see below).

3.6 The independent academic approach to transformation

In contrast with the approach taken by the universities of Derby and Exeter, the academic at the University of Bolton decided to take the whole process of transformation upon him/her self. S/he argued that an academic gaining an insight into what was involved in the whole transformation process would be very valuable for the project. The academic at the University of Bolton was given access to the original and *POCKET* versions of the development kit together with the process guide developed by the learning technologist at the University of Derby. However, as s/he was going to work in an independent mode the adoption of the process guide would have varied from the 'Learning Technologist led approach'. Certain stages would not have been appropriate (for instance stage 1 Needs analysis). The academic would have carried out stages 2 through to 9 independently.

S/he was confused at first about where to seek clarification when issues arose with the usage of the development kit(s). S/he thought initially that s/he should be contacting the *OpenLearn* team for advice when in actual fact s/he should have been contacting the learning technologist at the University of Derby for advice. S/he reported that s/he found it difficult to think in terms of self-contained units and that this approach requires reworking (this has also been found on *OpenLearn*). Although s/he had access to the versions of the development kit s/he felt that it was necessary to read a number of books on XML, which s/he admitted was unnecessary. His/her advice for transforming content in OU XML would be:

- do not read books on XML,
- do not attempt to understand the OU XML schema,
- do not use DreamWeaver or Word,
- use XML Copy Editor.

S/he mentioned that it was not clear from the OU XML package that one had to adapt an *OpenLearn* unit to make it usable for the upload of new content. It was also not clear what files were needed for the upload of the new content. S/he also discovered a problem with zipping the files for upload (which had happened to colleagues at the early *POCKET* team meeting mentioned above).

Table 3 POCKET OER published in OpenLearn LabSpace by University of Bolton, Jan 09

Topic areas	Number of study hours (provisional)	Level of study (provisional)	University of Bolton
PlaySpace	8 hours	Intermediate	Engineering Design
PlaySpace	8 hours	Intermediate	Engineering Design - Commercial Overview
PlaySpace	8 hours	Intermediate	Engineering Design - A project has a defined set stages called the Product Life Cycle (PLC)
PlaySpace	8 hours	Intermediate	Control Systems
PlaySpace	8 hours	Intermediate	Introduction to Verilog for FPGAs
PlaySpace	8 hours	Intermediate	Microelectronics Systems - Doc 2
PlaySpace	8 hours	Intermediate	Systems Design using FPGAs
PlaySpace	8 hours X 12 units = 96 hours	Intermediate	Industrial Management Units 1 to 12:

S/he also highlighted the fact that some of the OU XML tags might not be available from a random selection of a unit on *OpenLearn*. S/he also recommended that an updated version of the 'Hints and

Tips' guide, an 'idiots guide' and template to help with uploading new content should be included in the OU XML package. The *POCKET* OERs from the University of Bolton were not uploaded as early in the project as those from the University of Derby and the University of Exeter as a result of the issues mentioned above. These comments indicate again how the original OU XML package and the development kit(s) need to provide better guidance or support. Having undertaken this approach the academic at the University of Bolton understands the process and has been able to pass that knowledge on to two people who are assisting him/her with the OU XML transformation process. Nineteen draft units have been uploaded to the *PlaySpac*e part of the LabSpace, see Table 3.

Usually a unit in *OpenLearn* is a distinct entity. However, the use of unit numbers (Industrial Management units 1-12 in Table 3) by the University of Bolton suggests a progression route through the material. As these units are in the *PlaySpace* rather than under one of the twelve topic areas they would be considered at a draft stage that may need further refinement. This suggests that hours (in total 152), level of study (intermediate) and content are still under consideration.

3.7 The Convergence of both approaches to developing POCKET OER

It became apparent that special emphasis should be placed on the upload of new content to the *LabSpace* since the three campus based partners (universities of Derby, Bolton and Exeter) were uploading new content. It was important to separate out the different activities and therefore improvements to the download and repurposing of materials would follow on from the work undertaken on the uploading of new content.

The University of Derby working with *OpenLearn* and the University of Bolton came up with a similar solution independently though at a similar time. The University of Derby and *OpenLearn* suggested the need for 'an ideal version of the OU XML schema' while the University of Bolton described the need for a 'minimal course template'. Essentially the University of Bolton was asking for an empty version of the OU XML schema, that is, without the inclusion of OpenLearn course content. The 'ideal template' described by the University of Derby and *OpenLearn* would contain all tags (different units in *OpenLearn* required different treatment and therefore contained different tags) identified across all the different *OpenLearn* units.

The 'minimal course template' suggested by Bolton appeared to be more of a minimal version of the OU XML schema. It would be a really basic template containing the essential XML tags of:

- the course code and title,
- the preface and introduction,
- learning outcomes,
- a main section and paragraph,
- the back matter, for instance acknowledgements,

The 'ideal template' would additionally include:

- activities, including various media (video and flash) and the answer tag
- links to websites and also links to different sections of the same unit (cross references)
- lists (like bulleted lists and numbered lists)]
- sub-sections and sub-sub-sections

Templates (empty of content) such as those suggested above did not exist within *OpenLearn*.

With guidance from the University of Bolton and *OpenLearn*, the learning technologist at the University of Derby was in a position to develop a template. The template was to be used by the University of Bolton and new partner universities joining the project. In reality the 'ideal template' was developed instead of the 'minimal template' http://www.derby.ac.uk/pocket/cdk/xml. The 'ideal template' has been used by the University of Bolton and its usage has increased their production of *POCKET* OERs, which is evident from table 3 above. However, the 'minimal course template' may still be a viable alternative as a teaching tool for new partners. The Learning Technologist has found that the 'ideal template' might be too confusing for novice users. S/he intends to use and support the 'minimal course template' with new partners.

4. CONCLUSIONS

It appears that the OU XML download package has only been revised slightly since the *OpenLearn* launch date. Changes were made to the 'Hints and Tips' file. The main improvements to the OU XML package since launch have been made by the *POCKET* project. The project identified the need to accommodate the upload of new content.

The early findings suggest that the smaller *POCKET* team simplified the process of transforming educational course material into Open Content (one person taking on many roles). However, the throughput of material is likely to be less than from the much larger *OpenLearn* team.

Two different approaches to the transformation of *POCKET* material into OU XML were pursued within the *POCKET* project. One could be described as 'the learning technologist led approach' and the other as 'the independent academic approach'. Although the the paths taken were slightly different the ideas from both approaches converged. There was recognition for the need of an OU XML template and guidelines for its use. Independent transformation of module material was less successful but would be aided by the use of the new templates discussed above.

Factors which were valuable to POCKET at the start of the project where support from the *OpenLearn* team in terms of:

- mentoring,
- guidance with respect to *OpenLearn* policies, procedures, processes and updates,
- technical support in terms of understanding the infrastructure,
- guidance on copyright
- editorial and media support and
- pedagogic design and pedagogic support.

Additionally technical updates that occur on the *OpenLearn* websites need to be conveyed to partner institutions.

The course materials from the Universities of Derby, Bolton and Exeter have been divided into separate POCKET units. At the present time thirty-eight *POCKET* units have been published in the *LabSpace* (including those from new partners). In total these units are equivalent to 269 study hours (although 152 of these study hours are provisional, which is discussed above). These units are available under the following topic areas in the *LabSpace*:

- 6 Law units
- 6 Business and management units
- 1 study skills unit
- 1 Mathematics and Statistics unit
- 2 Health and Lifestyle unit
- 1 Science and Nature unit
- 19 PlaySpace units

This number of units and study hours uploaded to the *OpenLearn LabSpace* by *POCKET* is an indication that they could meet their target of between 250 and 600 study hours.

The *POCKET* project has highlighted the need:

- to streamline the processes for new people, placing new content on OpenLearn,
- specify ownership of tasks, and specification of roles
- for academic and non academic staff development in terms of:
    - how to create Open Content,
    - copyright,
    - identifying material suitable for open content.

'Access and usability are also important considerations' [1:p9] when developing OERs. The *POCKET* project has indicated that the accessibility and usability of the tools to create and reuse OERs are also important factors when encouraging reuse.

This paper reports initial evaluation findings from *POCKET*, funded by the United Kingdom Joint Information Systems Committee under the repositories and preservation programme. The evaluation of the *POCKET* project is ongoing and at present new partners outside the *POCKET* project are being supported to upload their content to the OpenLearn LabSpace.

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